

CLAIMS

What is claimed:

1. A programmable material consolidation system, comprising:
at least one fabrication site; and
a substrate handling system configured to introduce one or more substrates into the at least one fabrication site and remove the one or more substrates from the fabrication site.
2. The programmable material consolidation system of claim 1, wherein the substrate handling system comprises a rotary feed system.
3. The programmable material consolidation system of claim 1, wherein the substrate handling system comprises a linear feed system.
4. The programmable material consolidation system of claim 1, wherein the at least one fabrication site comprises a plurality of fabrication sites.
5. The programmable material consolidation system of claim 4, wherein the substrate handling system is configured to introduce the one or more substrates into each of the plurality of fabrication sites.
6. The programmable material consolidation system of claim 1, further comprising:
a cleaning component.
7. The programmable material consolidation system of claim 6, wherein the substrate handling system is configured to transport the one or more substrates having at least one feature fabricated thereon from the at least one fabrication site to the cleaning component.

8. The programmable material consolidation system of claim 7, wherein the at least one fabrication site comprises a plurality of fabrication sites.

9. The programmable material consolidation system of claim 8, wherein the substrate handling system is configured to transport substrates from each of the plurality of fabrication sites to the cleaning component.

10. The programmable material consolidation system of claim 9, further comprising: at least one processing element for controlling operation of the substrate handling system.

11. The programmable material consolidation system of claim 10, wherein the at least one processing element is configured to orchestrate movement of substrates from the plurality of fabrication sites to the cleaning component.

12. A programmable material consolidation system, comprising:
means for fabricating one or more objects; and
means for handling one or more substrates, the means for handling being configured for
introducing one or more substrates into the means for fabricating and removing the one or more substrates from the means for fabricating.

13. The programmable material consolidation system of claim 12, wherein the means for handling comprises a rotary feed system.

14. The programmable material consolidation system of claim 12, wherein the means for handling comprises a linear feed system.

15. The programmable material consolidation system of claim 12, wherein the means for fabricating comprises at least one fabrication site.

16. The programmable material consolidation system of claim 12, comprising a plurality of the means for fabricating.

17. The programmable material consolidation system of claim 16, wherein the means for handling is configured for introducing the one or more substrates into each of the means for fabricating.

18. The programmable material consolidation system of claim 1, further comprising: means for cleaning the one or more substrates.

19. The programmable material consolidation system of claim 18, wherein the means for handling is configured for transporting the one or more substrates having at least one feature fabricated thereon from the means for fabricating to the means for cleaning.

20. The programmable material consolidation system of claim 19, comprising a plurality of means for fabricating.

21. The programmable material consolidation system of claim 20, wherein the means for handling is configured for transporting substrates from each of the plurality of means for fabricating to the means for cleaning.

22. The programmable material consolidation system of claim 20, further comprising: at least one processing element for controlling operation of the means for handling.

23. The programmable material consolidation system of claim 22, wherein the at least one processing element is configured for orchestrating movement of substrates from the plurality of means for fabricating to the means for cleaning.

24. A programmed material consolidation method for fabricating objects, comprising: selecting at least one first substrate;

introducing the at least one first substrate into a first fabrication site with a substrate handling system associated therewith;
selecting at least one second substrate; and
introducing the at least one second substrate into a second fabrication site with the substrate handling system.

25. The method of claim 24, wherein introducing the at least one second substrate is effected while one or more objects are being fabricated on the at least one first substrate.

26. The method of claim 24, further comprising:
selecting at least one third substrate; and
introducing the at least one third substrate into a third fabrication site with the substrate handling system.

27. The method of claim 26, wherein introducing the at least one third substrate is effected while one or more objects are being fabricated on both the at least one first substrate and the at least one second substrate.

28. The method of claim 24, further comprising:
removing the at least one first substrate from the first fabrication site with the substrate handling system while one or more objects are being fabricated on the at least one second substrate.

29. The method of claim 28, further comprising:
transporting the at least one first substrate to a cleaning component with the substrate handling system following removing.

30. The method of claim 28, further comprising:
introducing at least another substrate into the first fabrication site with the substrate handling system following removing.

31. The method of claim 26, further comprising:
removing the at least one first substrate from the first fabrication site with the substrate handling system while one or more objects are being fabricated on both the at least one first substrate and the at least one second substrate.

32. The method of claim 31, further comprising:
transporting the at least one first substrate to a cleaning component with the substrate handling system following the removing.

33. The method of claim 31, further comprising:
introducing at least another substrate into the first fabrication site with the substrate handling system following the removing.